UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,199	08/29/2001	Mark S. Anvick	Y01-040	6969

7590 05/02/2003

Kenneth W. Float
The Law Offices of Kenneth W. Float
P.O. Box 80790
Rancho Santa Margarita, CA 92688

EXAMINER
FLANDRO, RYAN M

ART UNIT	PAPER NUMBER
3679	

DATE MAILED: 05/02/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/942,199	ANVICK, MARK S.	
	Examiner	Art Unit	
	Ryan M Flandro	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 4/10/03

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-17 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-17 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Objections

1. Claim 14 is objected to because of the following informalities: the word "second" in line 2 between the words "third" and "members" should be removed. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grisley (US 5,114,265), in view of Pontikas (US 4,809,755).

a. Claim 1. Grisley shows, in figures 4 and 5, a first flat member **13** having a predetermined shape, first and second opposed flat surfaces, and a first predetermined thickness. Grisley further shows a cavity **24** formed in the first member **13** that has a predetermined inner partially curved contour, that is exposed at the first flat surface of the first flat member **13** and along a portion of an edge of the first flat member **13**, and that has a depth that extends a predetermined distance below the first flat surface, and wherein the depth of the cavity **24** is a predetermined portion of the thickness of the first member **13** (**see figure 8**; column 4 lines 28-34). Grisley further shows a second flat member **12** having a predetermined shape, first and second opposed flat surfaces, and a second predetermined thickness, and having a tab **22** with an outer partially curved contour that substantially matches the inner contour of the cavity **24** in the first flat member **13** so that the tab **22** fits within the cavity **24** (see figures 4 and 5; column 4 lines 35-38), and said

tab **24** having a thickness that substantially matches the depth of the cavity **24** formed in the first flat member **13**.

i. Grisley lacks disclosure of the first and second members, when joined, being disposed at a predetermined noncollinear angle with respect to each other.

ii. Pontikas, however, teaches first **114** and second **116** members, when joined, being disposed at a predetermined noncollinear angle with respect to each other in order to provide an angled joint (see figure 20; column 6 lines 61-68).

iii. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made modify the joint of Grisley by including first and second members joined at a predetermined noncollinear angle in order to provide an angled joint as taught by Pontikas.

b. Claim 6. Grisley shows, in figures 4 and 5, a first flat member **13** having a predetermined shape, first and second opposed flat surfaces, and a first predetermined thickness that comprises a single cavity **24** having a predetermined inner contour, which single cavity is exposed at the first flat surface, and is exposed along a portion of an edge of the first flat member **13**, which single cavity has a depth that extends a predetermined distance below the first flat surface (see figures 4, 5, and 8). Grisley further shows a second flat member **12** having a predetermined shape, first and second opposed flat surfaces, and a second predetermined thickness, that comprises a single tab **22** with an outer contour that substantially matches the inner contour of the single cavity **24** and that fits within the single cavity **24** and wherein the first and second flat members **13, 12**, when joined, lie in the same plane (see figures 4 and 5; column 4 lines 35-38).

i. Grisley lacks disclosure of the first and second members, when joined, being disposed at a predetermined noncollinear angle with respect to each other.

ii. Pontikas, however, teaches first **114** and second **116** members, when joined, being disposed at a predetermined noncollinear angle with respect to each other in order to provide an angled joint (see figure 20; column 6 lines 61-68).

iii. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made modify the joint of Grisley by including first and second members joined at a predetermined noncollinear angle in order to provide an angled joint as taught by Pontikas.

c. Claim 12. Grisley shows a first flat member **13** having a predetermined shape, first and second opposed flat surfaces, and a first predetermined thickness that comprises a cavity **24** having a predetermined inner partially curved contour, that is exposed at the first flat surface, that is exposed along a portion of an edge of the first flat member **13**, and that has a depth that extends a predetermined distance below the first flat surface (see figures 4, 5, and 8). Grisley further shows a second flat member **12** having a predetermined shape, first and second opposed flat surfaces, and the first predetermined thickness, that comprises a cavity **24** having a predetermined inner partially curved contour which cavity **24** is exposed at the first flat surface, and is exposed along a portion of an edge of the second flat member **12**, which cavity has a depth that extends a second predetermined distance below the first flat surface, the members **12, 13**, when joined, lie in the same plane (see figures 4, 5, and 8; column 4 lines 35-38).

i. Grisley lacks explicit disclosure of a third flat member having a predetermined shape, first and second opposed flat surfaces, and a second predetermined thickness, that comprises first and second tabs with outer partially curved contours that substantially match the respective inner partially curved contours of the first and second cavities and that fit within the respective first and second cavities, and wherein the first, second, and third flat members are disposed at predetermined noncollinear angles with respect to each other.

ii. Pontikas, however, teaches members **114, 116**, when joined, being disposed at a predetermined noncollinear angle with respect to each other in order to provide an angled joint (see figure 20; column 6 lines 61-68).

iii. Pontikas, further teaches a third flat member **84** (***see figure 15***) having a predetermined shape, first and second opposed flat surfaces, and a second predetermined thickness, that comprises first and second tabs with outer partially curved contours that substantially match the respective inner partially curved contours of first and second cavities and that fit within the respective first and second cavities in order to create a variety of joint structures (see column 7 lines 55-60).

iv. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made modify the joint of Grisley by including first and second members joined at a predetermined noncollinear angle in order to provide an angled joint as taught by Pontikas. Further, it would have been obvious to one having ordinary skill in the art at the time the invention was made

to include a third flat member having first and second tabs that substantially match the contours of the cavities on the first and second members in order to create a variety of joints.

d. Claims 2, 8, and 14. The combination of Grisley and Pontikas further includes the thicknesses of the first and second members **13, 12** and third members being substantially the same (see Grisley figures 4 and 5; Pontikas figures 15 and 20).

e. Claims 7 and 13. Grisley further shows that the depth of the first and second caviies **24** and the thicknesses of the first and second tabs **22** are substantially the same (see Grisley figures 4 and 5; Pontikas figures 15 and 20).

f. Claims 3, 9, and 15. The combination of Grisley and Pontikas further includes the inner contours of the first and second cavities **24** and the outer partially curved contours of the first and second tabs **22** are sized to allow a glue to be disposed therebetween.

g. Claims 4, 10, and 16. The combination of Grisley and Pontikas also discloses that the inner partially curved contours of the first and second cavities **24** and the outer partially curved contours of the first and second tabs **22** have the shape of a piece of a puzzle (see figures 4 and 5; column 3 lines 63-64).

h. Claims 5, 11, and 17. Grisley also shows that the inner partially curved contour of the first and second cavities **24** and the outer partially curved contours of the first and second tabs **22** have the shape of a molar tooth (see figures 4 and 5).

Response to Arguments

3. Applicant's arguments filed 4/10/03 have been fully considered but they are not persuasive.

a. First, Applicant's argues that neither the Grisley patent nor the Pontikas patent shows "a structure wherein a cavity is formed in a first flat member that has a depth that extends a predetermined distance below the first flat surface, and wherein a second flat member has a tab formed therein that has a thickness that substantially matches the depth of the cavity formed in the first flat member" (paper no. 11, pages 5-6). In response to this argument, the Examiner respectfully points again to Grisley figure 8 which clearly shows indents and protrusions being a portion of the thickness of the respective wood pieces (see also column 2 lines 52-53; column 4 lines 28-34). Applicant is, however, correct in pointing out that Pontikas does not show this feature (paper no. 11, page 6, second paragraph). Therefore, the combination of Grisley and Pontikas, as set forth in the Office action, does in fact includes the tab and the cavity having a thickness and depth that are a portion of the overall thickness of the first and second flat members.

b. Second, Applicant's argues that neither the Grisley patent nor the Pontikas patent include only a single protrusion mating with a single cavity. In response to Applicant's argument that both Grisley and Pontikas include additional structure not required by Applicant's invention, it must be noted that both Grisley and Pontikas disclose the invention as claimed. Where the open transition terminology "comprising" is used, rather than the closed transition terminology "consisting of", the fact that the references disclose additional structure not claimed becomes irrelevant.

c. Lastly, Applicant's arguments with respect to claims 12-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to puzzle joint systems:

U.S. Patent 1,533,099 to Carroll

U.S. Patent 1,398,695 to Hull

U.S. Patent 151,952 to Beaufort

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan M Flandro whose telephone number is (703) 305-6952. The examiner can normally be reached on 8:30am - 5:30pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Ryan M. Flandro
April 21, 2003

Lynne H. Browne
Supervisory Patent Examiner
Technology Center 3670